

CLAIMS:

What is claimed is:

1. A method for communicating real time data streams between a plurality of virtual meeting attendees over a digital data network comprising the steps of:

receiving a plurality of real time data streams that include a first and a second real time data stream from each of a plurality of virtual meeting attendees;

linking said first real time data stream from each of the plurality of virtual attendees to a first network interface;

linking said second real time data stream from each of said plurality of virtual meeting attendees to a second network interface; and,

allowing a requestor to selectively link to one or more of said first and said network interfaces.

2. A method as defined by claim 1 and further including the steps of recording the usage of said requestor.

3. A method as defined by claim 2 wherein the step of recording said usage includes recording the time that selectively links to each of said one or more of said first and said second interface, and of recording the time said requestor disconnects from each of said one or more first and second network interfaces.

4. A method as defined by claim 2 wherein the step of recording said usage includes recording the amount of data consumed by said requestor.

5. A method as defined by claim 1 wherein said first real time data stream is audio data and said second real time data stream is video data.

6. A method as defined by claim 1 wherein said plurality of real time data streams further includes a third real time data stream, and further including the step of linking said third real time data stream from each of said plurality of virtual meeting attendees to a third network interface.

7. A method as defined by claim 6 wherein said plurality of real time data streams includes a total of n streams, and further including the step of linking each of said n streams from each of said virtual meeting attendees to one of n network interfaces, where n is any positive integer.

8. A method as defined by claim 7 wherein said first real time data stream from said n streams is video data, wherein said second real time data stream from said n streams is audio data, wherein said third real time data stream from said n streams is application data, and wherein a fourth real time data stream from said n streams is auxiliary data.

9. A method as defined by claim 1 wherein said first and second network interfaces are within a bridge.

10. A method as defined by claim 1 wherein said first and second interfaces are each one port.

11. A method as defined by claim 1 wherein said first and second interfaces are each a plurality of ports.

12. A method as defined by claim 1 wherein each of said plurality of real time data streams are encoded in a packet based protocol that includes a discrete control portion and a discrete data portion, wherein said first network interface includes a first port linked to said first real time data stream data portion to and a second port linked to said first real time data stream control

portion to, and wherein said second interface includes a first port linked to said second real time data stream data portion to and a second port linked to said second real time data stream control portion to

13. A method as defined by claim 1 wherein said plurality of virtual meeting attendees are a first plurality of virtual meeting attendees at a first virtual meeting, and wherein the method further includes the steps of:

receiving a second plurality of real time data streams from each of a second plurality of attendees of a second virtual meeting, said second plurality of real time data streams from each of said second plurality of virtual meeting attendees including a first and a second real time data stream;

linking only said first real time data stream from said second plurality of data streams from each of said second plurality of second virtual meeting attendees to a third network interface; and,

linking only said second real time data stream from each of said second plurality of second virtual meeting attendees to a fourth network interface.

14. A method as defined by claim 13 wherein said first real time data streams from each of said first plurality of first virtual meeting attendees and said first real time data streams from each of said second plurality of second virtual meeting attendees are video data streams, and wherein said second real time data streams from each of said first plurality of first virtual meeting attendees and said second real time data streams from each of said second plurality of second virtual meeting attendees are audio data streams.

15. A method as defined by claim 1 wherein said plurality of virtual meeting attendees are physically present in a plurality of conference rooms, each of said conference rooms having a plurality of cameras for communicating a plurality of real time video streams.

16. A method as defined by claim 1 and further including the step of designating at least one of said first and second network interfaces as a high bandwidth interface, and of connecting the highest bandwidth data stream from said plurality of real time data streams to said high bandwidth interface.

17. A method as defined by claim 1 wherein at least one of said first and second network interfaces is an interface between unicast and multicast communications.

18. A method as defined by claim 1 and further including the preliminary step of querying each of said plurality of virtual meeting attendees to identify said first and second real time data streams.

19. A method for linking data communications between a plurality of users in a virtual meeting on a data network, the method comprising the steps of:

designating a first network interface for communicating real time video data streams;

designating a second network interface for communicating real time audio data streams;

querying the plurality of users to determine what types of real time data streams each of said plurality of users will communicate to and from the network, said types of data including at least video and audio data; and,

linking each individual of said plurality of users to one or both of said first and second network interfaces depending on what types of data said each individual of said plurality of users selected.

20. A method as defined by claim 19 and further including the steps of recording the usage by each of said users of each of said first, second, third or fourth network interfaces.

21. A method as defined by claim 20 wherein the step of recording said usage includes recording the duration time that each of said users is linked to each of said first, second, third or fourth interfaces, and further including the step of multiplying said duration time by a respective per-unit time fee for said interface to calculate a fee for each of said plurality of users.

22. A method as defined by claim 20 wherein the step of recording said usage includes recording the data consumed by each of said users over each of said first, second, third or fourth interfaces, and further including the step of multiplying said data consumed by a respective per-unit data fee for said interface to calculate a fee for each of said plurality of users.

23. A method as defined by claim 19 and further including the step of designating at least one of said first or second interfaces as secure, and of only allowing said users to link to said secure interface after presentation of a password.

24. A computer program product for linking data communications between a plurality of users in each of a plurality of virtual meetings on a data network, the program product comprising computer executable instructions stored on a computer readable medium that when executed cause one or more computers to:

receive a first plurality of real time data streams from each of a plurality of first meeting attendees, said plurality of real time data streams including at least one real time video data stream and at least one real time audio data stream from each of said plurality of first meeting attendees;

receive a second plurality of real time data streams from each of a plurality of second virtual meeting attendees, said second virtual meeting occurring at least partially concurrently with said first virtual meeting, said second plurality of real time data streams including at least one real time video

data stream and at least one real time audio data stream from each of said second virtual meeting attendees;

link only said real time video data streams from said plurality of first meeting attendees to a first network interface and linking only said real time audio data streams from said plurality of first meeting attendees to a second network interface;

link only said real time video data streams from said plurality of second meeting attendees to a fourth network interface and linking only said real time audio data streams from said plurality of second meeting attendees to a fifth network interface; and

allow a requestor to selectively choose which of said interfaces to receive data streams from.

25. A computer program product as defined by claim 24 wherein the program instructions further cause the one or more computers to assign an identifier to each of said first, second, third and fourth interfaces, said identifier having inherent knowledge that describes the content of the data streams linked thereto.

26. A computer program product as defined by claim 24 wherein the program instructions further cause the one or more computers to assign identifiers to each of said network interfaces, said identifier for said first network interface including A and X, said identifier for said network second interface including A and Y, said identifier for said third network interface including B and X, and said identifier for said fourth network interface including B and Y, where A is an identifier for said first virtual meeting, B is an identifier for said second virtual meeting, X is an identifier for an interface having only video data, and Y is an identifier for an interface having only audio data.